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7590 1008/2009 Philip M. Weiss, Esq. Weiss & Weiss			EXAMINER	
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## Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

### Application No. Applicant(s) 09/769,076 KRYSIAK ET AL. Office Action Summary Examiner Art Unit ANDREA M. VALENTI 3643 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 11 August 2009. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-30.32.36-42 and 45-53 is/are pending in the application. 4a) Of the above claim(s) 1-25.36.37.39-42.45.46.48.49.51 and 53 is/are withdrawn from consideration. Claim(s) is/are allowed. 6) Claim(s) 26-30.32.38.47.50 and 52 is/are rejected. 7) Claim(s) \_\_\_\_\_ is/are objected to. 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abevance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner, Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some \* c) ☐ None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \* See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date. Notice of Draftsperson's Patent Drawing Review (PTO-948)

Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date \_\_\_\_\_\_.

5) Notice of Informal Patent Application

6) Other:

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#### DETAILED ACTION

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 26, 27, and 38 are rejected under 35 U.S.C. 102(a) as being anticipated by U.S. Patent No. 6,021,598 to Holton.

Regarding Claim 26, 27, 38, Holton teaches a colored mulch product (Holton abstract) consisting essentially of: a material comprising a fiber cellulose, clay, loam, sand, and/or a combination of same; a binding agent (Holton, water claim 1); and a dye and/or pigment (Holton Col. 4 line 8-10); the mulch product not being in a form of a mat (Holton Col. 6 line 1-24). Holton teaches a dye and that the dye indicates to a user environmental conditions of the soil where the mulch is placed. The mulch of Holton includes a dye, seed and a fertilizer (Holton Col. 6 line 1-3). Therefore, when the user sees the mulch color the user will known that mulch has been applied to that portion of soil along with a fertilizer/seed i.e. that soil portion has been fertilized/seeded which is an environmental condition.

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 26, 27, 28, 29, 30, 38, and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,021,598 to Holton in view of U.S. Patent No. 6,019,062 to Lombard et al.

Regarding Claim 26, 28, 29, 30 and 50, Holton teaches a colored mulch product (Holton abstract) consisting essentially of: a material comprising a fiber cellulose, clay, loam, sand, and/or a combination of same; a binding agent (Holton Claim 1, water); and a dye and/or pigment (Holton Col. 4 line 8-10). Stevens teaches a dye, but is silent on the dye **indicates** to a user environmental conditions of the soil where said mulch is placed; the dye **indicates** to a user the acidity of said soil; the dye **indicates** to a user the moisture content of said soil; or the dye **indicates** to a user the chemical content of said soil and it is an environmentally safe dye (Lombard abstract second to last line).

However, Lombard et al teaches a dye indicator i.e. a pH indicating dye for application to cellulosic material such as paper (Lombard Col. 2 line 1-5 and Col. 2 line 11-15; Col. 2 line 60-67). It would have been obvious to one of ordinary skill in the art to modify the teachings of Holton with the teachings of Lombard at the time of the invention since the modification is merely an engineering design choice involving the selection of a known alternate dye selected for the known advantage of monitoring pH levels as taught by Lombard and is an environmentally safe dye as taught by Lombard (Lombard abstract).

Regarding Claim 27, Holton as modified teaches the mulch comprising; nitrogen, phosphorous, and potassium fortifiers (Holton Claim 8).

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Regarding Claim 38, Holton as modified teaches the mulch is the same or similar color of an actual plant, flower, fruit, or vegetable of a seed planted with the mulch (Holton Col. 4 line 8-10).

Claim 52 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,021,598 to Holton in view of U.S. Patent No. 6,019,062 to Lombard et al as applied to claim 26 above, and further in view Japanese Patent JP 01262735 A to Yanmar Agricult Equip Co LTD (Yamada).

Regarding Claim 52, Holton as modified teaches a method of placing colored mulch on top of soil; changing the colors of the mulch based on the condition of the soil. Holton is silent on adding chemicals to the soil based on the color of the mulch. However, it is old and notoriously well-known in the art of plant husbandry to observe and test soil conditions to see if they meet the desired parameters and to adjust the parameters when necessary. Yanmar teaches the general knowledge of one of ordinary skill in the art to add fertilizer when the pH is out of desired range (Yanmar abstract and Fig. 1 #2). General knowledge that the pH of a growing medium component determines the addition of fertilizer. It would have been obvious to one of ordinary skill in the art further modify the teachings of Holton with the teachings of Yanmar at the time of the invention for the advantage of promoting healthy plant development. Examiner takes official notice that it is old and notoriously well-known to add fertilizer based on a pH of the soil e.g. tomato plants prefer a certain acidity in the soil for healthy development so it is general practice to test the pH to determine if and how much fertilizer is needed.

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Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,021,598 to Holton in view of U.S. Patent No. 6,019,062 to Lombard et al as applied to claim 26 above, and further in view of U.S. Patent No. 5,734,167 to Skelty.

Regarding Claim 32, Holton as modified teaches coloring the mulch, but is silent on the dye is florescent. However, Sketly teaches it is old and notoriously well-known to dye agricultural products with florescent dye allowing the mulch to glow in the dark (Sketly Col. 1 line 35-45). It would have been obvious to one of ordinary skill in the art to further modify the teachings of Holton with the teachings of Sketly at the time of the invention since the modification is merely the selection of a known alternate coloring for the advantage of enabling safe night time agricultural operations as taught by Sketly (Sketly Col. 1 line 1-26).

Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,324,781 to Stevens in view of U.S. Patent No. 5,734,167 to Skelty.

Regarding Claim 32, Holton teaches coloring the mulch, but is silent on the dye is florescent. However, Sketly teaches it is old and notoriously well-known to dye agricultural products with florescent dye allowing the mulch to glow in the dark (Skelty Col. 1 line 35-45). It would have been obvious to one of ordinary skill in the art to further modify the teachings of Holton with the teachings of Skelty at the time of the invention since the modification is merely the selection of a known alternate coloring for

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the advantage of enabling safe night time agricultural operations as taught by Skelty (Skelty Col. 1 line 1-26).

Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S.

Patent No. 4.067.140 to Thomas in view of U.S. Patent No. 6,019,062 to Lombard et al. Regarding Claim 47, Thomas teaches a colored mulch product (Thomas abstract) comprising: a material comprising a fiber cellulose (Thomas abstract first line). clay, loam, sand, and/or a combination of same; a binding agent (Thomas Col.1 line 30 "wetting agent" and Col. 4 line 35-41); and a dve and/or pigment (Thomas Col. 1 line 35) produced by a lifting and tumbling agglomeration operation (Thomas Col. 2 line 65-66. Thomas teaches adding fertilizer to the mulch mixture (Thomas Col. 1 line15). The language "indicates to a user environmental conditions of the soil where the mulch is place" is functional language/result of the use of the product that the product is "capable" of performing. The applicant has not claimed a specific type or special dye; applicant has not claimed what environmental conditions; applicant has not claimed how the dye works. Applicant has merely claimed a dye. The color from the dye is capable of indicating to the user that the mulch has been placed on a desired surface and that the environmental condition of the soil under that mulch is in a stage of fertilization since fertilizer is present in the mulch and over time with be absorbed into the soil. The mulch can also container seeds (Thomas Col. 1 line 15), so when the mulch with is placed in position and has seeds present it indicates to the under that the "environmental

condition" of that soil area is "planted". Applicant has not patentably distinguished over

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the prior art of record. It can also be argued that Thomas is silent on the dye indicates to a user the environmental conditions of the soil where the mulch is place. However, Lombard et al teaches a dye indicator i.e. a pH indicating dye for application to cellulosic material such as paper (Lombard Col. 2 line 1-5 and Col. 2 line 11-15; Col. 2 line 60-67). It would have been obvious to one of ordinary skill in the art to modify the teachings of Stevens with the teachings of Lombard at the time of the invention since the modification is merely an engineering design choice involving the selection of a known alternate dye selected for the known advantage of monitoring pH levels as taught by Lombard.

Claim 50 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S.

Patent No. 6,324,781 to Stevens in view of U.S. Patent No. 5,697,984 to Swatzina et al.

Regarding Claim 50, Stevens teaches a colored mulch product wherein the color, but is silent on the mulch product fades or disappears in response to a lack of fertilizer in the mulch. Stevens teaches the mulch product is made up of fertilizer (Stevens abstract last sentence), mulch plus fertilizer makes a mulch product. Swatzina teaches it is old and notoriously well-known to color fertilizer (e.g. red fertilizer Swatzina; Col. 2 line 31-33 and Example 4). One of ordinary skill in the art would be motivated to modify the teachings of Stevens with the teachings of Swatzina at the time of the invention for a desired aesthetic design. Stevens as modified by Swatzina, i.e. the selection of red fertilizer, would inherently teach that as the red disappears or fades from the mulch the fertilizer is disappearing too.

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Claim 50 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S.

Patent No. 6,021,598 to Holton in view of U.S. Patent No. 5,697,984 to Swatzina et al.

Regarding Claim 50, Holton teaches a colored mulch product wherein the color, but is silent on the mulch product fades or disappears in response to a lack of fertilizer in the mulch. Holton teaches the mulch product is made up of fertilizer (Holton Claim 8), mulch plus fertilizer makes a mulch product. Swatzina teaches it is old and notoriously well-known to color fertilizer (e.g. red fertilizer Swatzina; Col. 2 line 31-33 and Example 4). One of ordinary skill in the art would be motivated to modify the teachings of Holton with the teachings of Swatzina at the time of the invention for a desired aesthetic design. Holton as modified by Swatzina, i.e. the selection of red fertilizer, would inherently teach that as the red disappears or fades from the mulch the fertilizer is disappearing too.

### Response to Arguments

Applicant's arguments with respect to claims <u>26-30.32.38.47.50 and 52</u> have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed 11 August 2009 have been fully considered but they are not persuasive.

Regarding Claims 26, 27, 38, the structural component "dye" of the apparatus claim limitation is satisfied by the dye of Holton since the dye of Holton does perform in the similar manner as the claimed dye. The dye of Holton indicates to a user

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environmental conditions of the soil where the mulch is placed i.e. planted and/or fertilized.

Holton teaches a mulch product made up of paper (Holton abstract). Lombard explicitly teaches that the cellulosic material is particles of paper (Lombard Col. 2 line 61-63). Lombard teaches the general knowledge that numerous pH-indicating dyes are known (Lombard Col. 3 line1). It is the examiner's position that the modification is merely the simple substation of one known dye for another known dye to obtain predictable results, to monitor the pH conditions of a paper based material as taught by Lombard. There are many ways the dye of Holton and of Holton modified "indicates" and one such example is that it indicates to a user that portion of soil has been planted and/or fertilized (Holton claim 8). Method claim 50 doesn't even explicitly claim that it is the dye that changes colors to indicate an environmental condition, but merely claims that the mulch changes colors.

Applicant argued that the Lombard reference is a visual indicator where urine is present and there is no teaching to combine the reference of Lombard. However, the examiner maintains that there is some teaching and motivation found both in the references and in the knowledge generally available to one of ordinary skill in the art. Holton teaches a mulch of paper. It is well known in both the art of plant husbandry and animal husbandry that paper can be applied as mulch ground cover and as an animal feces collection cover i.e. litter. Therefore, both Holton and Lombard teach a cellulosic substrate i.e. paper that receives a dye. Lombard is cited to teach that it is known to apply a pH-indicating dye solution to provide a visually detectable color transition at a

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particular pH level to a paper substrate (Lombard abstract). Holton teaches it is known to dye paper (Stevens Col. 7 line 35). Examiner maintains that the modification is merely an engineering design choice involving the selection of a known alternate dye/additive applied to a paper substrate selected for the known advantage taught by Lombard of visually indicating pH levels. The modification is merely the simple substitution and/or combination of known prior art elements to obtain predictable results.

Lombard is reasonably pertinent to the particular problem with which applicant was concerned i.e. a means of providing a visual indicator of an environmental condition such as pH areas.

Lombard teaches an environmentally safe dye for application to fiber cellulosic base material. Lombard teaches the dye can change from a blue to red (Lombard abstract) which could be considered an aesthetic effect too. It can also be argued that Holton teaches a fertilizer application and animal urine is an old and notoriously well-known fertilizer component that is particularly desirable for application around plants that have a high nitrogen requirement. It can be argued that the motivation to combine the reference could also be to tell where an animal has urinated to identify the environmental condition of fertilization. In other words, it would have been obvious to modify/substitute the colored dye taught by Holton with the dye of Lombard in order to identify animal urination as taught by Lombard to known an area has received nitrogen fertilization. Again, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for

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patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Holton teaches a cellulosic fiber base with a dye that gives it color; Lombard is cited as general knowledge in the art of a known alternate environmentally friendly dye that is well received by a cellulosic fiber base. It has been discussed in the above paragraphs that there is motivation found in the art to combine the teachings for the colored red/blue aesthetic effect taught by Lombard along with the ability to determine if an animal has urinated in a certain region i.e. released nitrogen components into an environmental region. Holton is concerned with promoting plant growth and providing fertilizer. Yanmar teaches general knowledge in the art that healthy plant growth requires monitoring the pH to know when more fertilizer is necessary. The combination is merely the application of a known technique to a known device ready for improvement to yield predictable results.

Thomas teaches a mulch product made by tumbling agglomeration with a dye, fertilizer and seeds (Thomas col. 1 line 15). A similar argument applied to support the combination teachings of Holton above can be applied to support the teachings of Thomas. The language "indicates to a user environmental conditions of the soil where the mulch is place" is functional language/result of the use of the product that the product is "capable" of performing. The applicant has not claimed a specific type or special dye; applicant has not claimed what environmental conditions; applicant has not claimed how the dye works. Applicant has merely claimed a dye. The color from the dye is capable of indicating to the user that the mulch has been placed on a desired

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surface and that the environmental condition of the soil under that mulch is in a stage of fertilization since fertilizer is present in the mulch and over time will be absorbed into the soil. The mulch can also container seeds (Holton claim 8), so when the mulch with is placed in position and has seeds present it indicates to the under that the "environmental condition" of that soil area is "planted". Applicant has not patentably distinguished over the prior art of record. Furthermore, Lombard teaches the dye can change from a blue to red (Lombard abstract) which could be considered an aesthetic effect too. It can also be argued that Thomas teaches fertilizer application and animal urine is an old and notoriously well-known fertilizer component that is particularly desirable for application around plants that have a high nitrogen requirement. One would be motivate to monitor urine applications via the dye taught by Lombard.

Examiner maintains that applicant has not patentably distinguished over the teachings of the cited prior art of record.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANDREA M. VALENTI whose telephone number is (571)272-6895. The examiner can normally be reached on 6:00am-4:30pm M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter M. Poon can be reached on 571-272-6891. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Andrea M. Valenti/ Primary Examiner, Art Unit 3643

05 October 2009